REMARKS

Favorable consideration of this application, as presently amended, is respectfully requested.

By way of the present preliminary amendment, applicants have further described some of the attributes of the switched fabric architecture device. This additional description of devices which are known helps to further understand this particular application of present invention. Since this is merely a further description of the devices described in originally presented paragraph 0011, no new matter is involved.

Applicants are also submitting here with additional claims which refer specifically to an apparatus, method and system for transferring data packets in a switched fabric architecture system. Thus, these claims are similar to the originally presented claims but specifically referred to this one type of application.

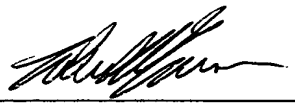
Applicants request that the present amendment be entered and that the claims be considered and allowed.

Attached hereto is a marked-up version of the changes made to the claims by the present amendment.

To the extent necessary, please charge any shortage in the fees due in connection with the fling of this paper, including extension of time fees, to Deposit Account No. 01-2135 (219.40018X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Robert F. Gnuse, Registration No.27, 295

RFG:dmw
(703) 312-6600 – phone
(703) 312-6666 – fax
rgnuse@antonelli.com - e-mail

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

After paragraph 0011, please insert the following:

[0011.1] The switched fabric architectures discussed above generally consist of a network of multiple independent clustered nodes connected by point-to-point links. Each node may be an intermediate node, such as a switch/switch element, a repeater, and a router or an end-node within the network, such as a host system and an I/O unit (e.g., data servers, storage subsystems and network devices). Message data may be transmitted from source to destination, often through intermediate nodes.

[0011.2] Existing interconnect transport mechanisms, such as PCI (peripheral component interconnect) buses may be utilized to deliver message data to and from I/O devices, namely storage subsystems and network devices. However, PCI buses utilize a shared memory-mapped bus architecture that includes one or more shared I/0 buses to deliver message data to and from storage subsystems and network devices. Shared I/0 buses can pose serious performance limitations due to the bus arbitration required among storage and network peripherals as well as posing reliability, flexibility and scalability issues when additional storage and network peripherals are required. As a result, existing interconnect technologies have failed to keep pace with computer evolution any increased demands generated and burden imposed on server clusters, application processing, and enterprise computing created by the rapid growth of the Internet.

[0011.3] Emerging solutions to the shortcomings of existing PCI bus architecture are InfiniBand and its predecessor, Next Generation I/0 (NGIO) which have been developed by Intel Corp. to provide a standards-based I/0 platform that uses a switched fabric and separate I/O channels instead of a shared memory-mapped bus architecture for reliable data transfers between the end-nodes. Using NG I 0 or InfiniBand, a host system may communicate with one or more remote systems using a virtual interface architecture. This hardware and software may often be used to support data transfers between two memory regions, typically on different systems over one or more designated channels. Each host system using a virtual interface architecture may contain work queues formed in pairs including inbound and outbound queues in which requests, in the form of descriptors, are posted to describe data movement operation and location of data to remove for processing and/or transportation via a data network. Each host system may serve as a source system which initiates a message data transfer (message sent operation) or a target system of a message passing operation (message receive operation). Requests for work (data movement operations such as message send/receive operations and remote direct memory access read/write operations) may be posted to work queues associated with a given network interface card. One or more channels between communication devices at a host system are between multiple host systems connected together directly or via a data network may be created and manage so that requested operations can be performed.

Please rewrite paragraph 0013 as follows:

[0013] As seen, each physical connection 18 and 20 connects two channels in adjoining nodes. It is possible to utilize a single physical connection to connect two channels by alternating or interleaving units of data such as packets or flits from the two channels. In some cases, the channels then are called virtual channels because they do not have a separate physical connection but share the connection. The physical connection can be shared on a flit-by-flit basis when desired, or packet-by-packet when possible. When the individual flits are received, they are reassembled into a single packet and stored in queue 40. Since the processor bus can only handle data in complete packets, it is necessary for the flits to be reassembled into a packet before being transferred onto the bus. Thus, it is said that the bus 12 and the physical connections 18 and 20 have different resource sharing paradigms, because data [my] may move in flits or packets in connections 18 and 20, but only in packets in BUS 12.

Please rewrite paragraph 21 as follows:

[0021] Other arbitration schemes are possible. If more than two channels are using the same physical connection, the scheme [must] may be enlarged to take account of all of the other channels. Also, if the controllers are set up so that one controller acts as a master, the scheme [must] may be adjusted so that the master receives all of the information and makes all the decisions and merely sends an enabling signal to the other controllers.